Leading the Battle to End 'Hidden Hunger'

1997-12-08

info@idrc.ca

A Dime Can Do It

Pennies per person per month, that's all it takes to end micronutrient malnutrition. A dime puts enough iodine into salt or iron into flour to meet the dietary needs of one person for a whole year. When solutions to these deficiencies are so available, affordable, and feasible, why do billions of people continue to suffer?

Unlike gnawing hunger, micronutrient malnutrition is invisible. There are few outward signs even among those affected. Years of persistent research and strong advocacy were needed to bring the enormous social and economic costs of this hidden hunger to the attention of global leaders and health and development specialists.

As early as 1980, an IDRC-funded study in Zaire confirmed that cassava, a food staple for 300 million people worldwide, can accelerate goitre in populations with a low or deficient iodine intake. Projects in Argentina, Ethiopia, Ghana, and other developing countries shed light on the role of iron and vitamin A in disease and death, especially among women and children.

Canada played a lead role in transforming scientific evidence into political action. It co-chaired the 1990 World Summit for Children. A year later, it hosted the Ending the Hidden Hunger conference in Montreal. Canada was first to allocate "new money" -- $5 million -- toward eliminating micronutrient malnutrition. In 1992, this momentum led to the birth of the Micronutrient Initiative (MI) as the organization to lead the global effort.

MI's architects chose IDRC as the headquarters for MI's international secretariat. The Centre, in addition to its history of support for micronutrient-related research, had the contacts among the scientific, nongovernmental, political, and donor communities to lead a concerted international effort. They would help MI tailor solutions to the particular circumstances of each developing region and country. The support of IDRC's scientific, administrative, information systems, and legal staff would allow MI to focus on its goals of ending iodine-deficiency disorders, eliminating vitamin A deficiency, and cutting iron-deficiency anemia in women by one-third of the 1990 levels -- all by the year 2000!

The MI Approach

MI has developed an approach that targets both the household and policy levels. It combines research with advocacy and cooperative effort. It relies on four strategies that research shows to be effective and affordable.

Dietary improvements Millions of African villagers with too little iron, vitamin A, and zinc in their diet can benefit from strategies for dietary improvement based on food practices. An MI-supported project in Malawi is developing ways to increase the amount of iron and zinc obtainable from local grains by soaking, germinating, and fermenting them. The project will especially benefit communities with no access to processed foods and little likelihood of obtaining fortified ones (except iodized salt) for several years.

Fortification of food staples A recent Globe and Mail article, "Iodine Deficiency all but Beaten," notes that, in many countries, 6080% of the salt used for cooking now has iodine. The United Nation's Children's Fund (UNICEF) says that since 1990 some 1.5 billion people have begun to consume iodized salt for the first time, protecting some 12 million infants yearly from mental retardation.

Efforts to reduce the widespread effects of iron deficiency are proving more difficult. However, MI-supported initiatives are helping several countries in Latin America and the Middle East fortify their flour with iron. With the support of MI and IDRC, University of Toronto scientists have successfully fortified salt with both iron and iodine, overcoming a hurdle that has baffled scientists for over 20 years. Ghanaian researchers are testing the efficacy of the new salt. The next step will be its application in other countries of Africa, Asia, and Latin America.

MI also promotes private-sector involvement in food fortification. Forums and regional meetings with industry and public-sector representatives have raised awareness and a recognition of the value and importance of fortified foods. MI is following up on discussions with hundreds of chief executive officers and other senior food industry managers in Africa, Asia, Latin America, and the Middle East. Governments on all continents are looking seriously at fortification of staple and processed foods as the mainstay for delivering micronutrients to large numbers of people.

Supplementation But across-the-board fortification of foods is not enough to meet the needs of vulnerable groups such as infants and pregnant women. Their requirements for additional iron and vitamin A, in particular, can best be met through the use of supplements. Already, high-dose vitamin A capsules are having a measurable impact in preventing vitamin A deficiencies in the South. Through MI funding to the World Health Organization (WHO), children in at least 10 countries will receive vitamin A supplements together with their vaccinations. Mothers will receive one dose immediately after delivery.

MI also supported a WHO experts meeting that recommended ways in which women can safely use vitamin A supplements during and after pregnancy. MI is also supporting the formulation of more effective delivery schemes for iron supplements.

Public health measures Public health measures can control situations, such as parasitic infections, that often contribute to micronutrient deficiencies. The results of a study in Ethiopia indicate that efforts to reduce iron deficiency must also focus on malaria control. Trials funded by a consortium of donors, including IDRC, have found an effective way to prevent the malaria-carrying Anopheles mosquito from biting its would-be victims. Simple bednets dipped in a nontoxic pesticide may help save the lives of 500 000 children who die each year of the direct or indirect influence of malaria.

At the Centre of a Global Effort

MI is at the centre of this global effort to eliminate micronutrient malnutrition. Although barely 5 years old, it was rated second, after UNICEF, among 27 institutions in a survey, by leading nutritionist James Levinson of Tufts University, of agencies working in the health and nutrition sector.

Governments in the South look to MI for help to make fortification the law of the land. Industry leaders rate highly MI's nonpartisan role in developing technical guidelines and norms for the production of fortified foods. Health professionals and NGOs engaged in public health education use MI funds and information for their programs.

International bodies call upon MI to help plan, support, and implement micronutrient activities. Through its global vitamin initiative, MI has provided UNICEF with support for programs in 20 Asian, African, and Latin American countries. The World Bank has publicly pledged its continued support to MI "as a catalyst of greater action in the affected countries, among donors and by the food industry."

At the request of the Bank and the Indian government, MI is helping to prepare a plan for India. The project is part of a major South Asia micronutrients initiative designed to help Bangladesh, India, Nepal, and Pakistan to end hidden hunger. Over a billion people could benefit.

By bringing these different players around the table, MI is building the critical mass needed to ensure that public opinion, strong policy instruments, and sound economic incentives support their various efforts. A broad-based consensus that cuts across social and economic strata is vital if programs to eliminate micronutrient deficiencies are to continue over the long term. Transforming this vision into reality means that ordinary people must be involved. MI's mission will have neared its end when people are able and ready to consume adequate quantities of healthful foods, including those fortified with nutrients not adequately provided in their current diet.

In the final analysis, MI's true goal is to be so successful that it will no longer be needed. Each victory brings this goal one step closer.